Listing of Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. – 33. (Canceled).

34. (Previously presented) A device that adaptively reduces ringing artifacts in an input image including pixels of image information, comprising:

a ringing-artifact detector that detects areas of ringing artifacts in a pixel window based on the pixel information, the pixel window including a set of pixels from the input image pixels;

an image processor that processes window pixels to generate pixels with reduced ringing artifacts;

a combiner that selects the processed pixels with reduced ringing artifacts in the detected ringing-artifact areas, and generates an output image comprising: (i) the selected processed pixels with reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

a variance detector that determines local variance of each pixel in the window with respect to neighboring pixels, wherein the local variances indicate presence of noisy areas in the image; and

a signal detector that based on the local variances, detects if the location of the window is proximate a noisy area in the input image;

such that the combiner further selects pixels with reduced ringing artifacts from the processed pixels, based on the detected ringing artifact areas and the detected window location

information, and generates that enhanced output image comprising: (i) the selected pixels with

reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

whereby the output image includes portions of the input image where ringing artifacts

were not detected, and portions of the processed image corresponding to areas in the input image

where ringing artifacts were detected, such that the output image is an enhanced version of the

input image with ringing artifacts substantially reduced;

wherein the combiner selectively combines portions of input image with portions of

processed image based on proximity of the window to a ringing artifact area, to generate the

output image in which ringing artifact areas are substantially suppressed;

wherein the closer the window to a ringing artifact area, the higher the portion of the

processed image that the combiner selects for the output image.

35. (Previously presented) A device that adaptively reduces ringing artifacts in an input image

including pixels of image information, comprising:

a ringing-artifact detector that detects areas of ringing artifacts in a pixel window based

on the pixel information, the pixel window including a set of pixels from the input image pixels;

an image processor that processes window pixels to generate pixels with reduced ringing

artifacts;

a combiner that selects the processed pixels with reduced ringing artifacts in the detected

ringing-artifact areas, and generates an output image comprising: (i) the selected processed

pixels with reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

a variance detector that determines local variance of each pixel in the window with

respect to neighboring pixels, wherein the local variances indicate presence of noisy areas in the

image; and

a signal detector that based on the local variances, detects if the location of the window is

proximate a noisy area in the input image;

such that the combiner further selects pixels with reduced ringing artifacts from the

processed pixels, based on the detected ringing artifact areas and the detected window location

information, and generates that enhanced output image comprising: (i) the selected pixels with

reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

whereby the output image includes portions of the input image where ringing artifacts

were not detected, and portions of the processed image corresponding to areas in the input image

where ringing artifacts were detected, such that the output image is an enhanced version of the

input image with ringing artifacts substantially reduced;

wherein the combiner selectively combines portions of input image with portions of

processed image based on proximity of the window to a ringing artifact area, to generate the

output image in which ringing artifact areas are substantially suppressed;

wherein the farther the window from a ringing artifact area, the higher the portion of the

input image that the combiner selects for the output image.

36. (Canceled.)

37. (Previously presented) A device that adaptively reduces ringing artifacts in an input image

including pixels of image information, comprising:

a ringing-artifact detector that detects areas of ringing artifacts in a pixel window based

on the pixel information, the pixel window including a set of pixels from the input image pixels;

an image processor that processes window pixels to generate pixels with reduced ringing

artifacts; and

a combiner that selects the processed pixels with reduced ringing artifacts in the detected

ringing-artifact areas, and generates an output image comprising: (i) the selected processed

pixels with reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

whereby the output image includes portions of the input image where ringing artifacts

were not detected, and portions of the processed image corresponding to areas in the input image

where ringing artifacts were detected, such that the output image is an enhanced version of the

input image with ringing artifacts substantially reduced;

wherein the ringing-artifact detector comprises:

a pattern detection function that detects ringing pattern-like features in the window;

a variance detector that determines local variance of each pixel in the window with

respect to neighboring pixels, wherein the local variances indicate presence of noisy areas in the

image;

a signal detector that based on the local variances, detects if the location of the window is

proximate a noisy area in the input image;

a ringing-like area detection function that, based on the detected noisy area and the

detected ringing-like pattern, determines proximity of the window to a ringing-like area in the

input image; and

wherein the combiner selectively combines pixel from portions of the input image with

portions of the processed pixels based on proximity of the window to a ringing-like area, to

generate the output image wherein ringing-like artifacts are substantially reduced;

wherein the closer the window to a ringing artifact area, the higher the portion of the

processed pixels that the combiner selects for the output image.

38. (Previously presented) A device that adaptively reduces ringing artifacts in an input image

including pixels of image information, comprising:

a ringing-artifact detector that detects areas of ringing artifacts in a pixel window based

on the pixel information, the pixel window including a set of pixels from the input image pixels;

an image processor that processes window pixels to generate pixels with reduced ringing

artifacts; and

a combiner that selects the processed pixels with reduced ringing artifacts in the detected

ringing-artifact areas, and generates an output image comprising: (i) the selected processed

pixels with reduced ringing artifacts, and (ii) the remaining window pixels from the input image;

whereby the output image includes portions of the input image where ringing artifacts

were not detected, and portions of the processed image corresponding to areas in the input image

where ringing artifacts were detected, such that the output image is an enhanced version of the

input image with ringing artifacts substantially reduced;

wherein the ringing-artifact detector comprises:

a pattern detection function that detects ringing pattern-like features in the window;

a variance detector that determines local variance of each pixel in the window with

respect to neighboring pixels, wherein the local variances indicate presence of noisy areas in the

image;

a signal detector that based on the local variances, detects if the location of the window is

proximate a noisy area in the input image;

a ringing-like area detection function that, based on the detected noisy area and the

detected ringing-like pattern, determines proximity of the window to a ringing-like area in the

input image; and

wherein the combiner selectively combines pixel from portions of the input image with

portions of the processed pixels based on proximity of the window to a ringing-like area, to

generate the output image wherein ringing-like artifacts are substantially reduced;

wherein the farther the window from a ringing artifact area, the higher the portion of the

input image pixels that the combiner selects for the output image.

39. (Canceled).